

# Comparisons of Job Characteristics

**Focus Occupation:** [Structural Metal Fabricators and Fitters \(51-2041\)](#)

**Associated Occupation:** [Sheet Metal Workers \(47-2211\)](#)

[Compare Knowledge](#)

[Compare Skills](#)

[Compare Abilities](#)

[Compare Detailed Work Activities](#)

[Compare Tools and Technologies](#)

<<	Focus occupation element is much lower
<	Focus occupation element is lower
0	Focus occupation element is at a similar level
>	Focus occupation element is at a higher level
>>	Focus occupation element is at a much higher level

## Knowledge

Similarity of Focus Occupation to Associated Occupation: 91

**Focus Occupation:** Structural Metal Fabricators and Fitters (51-2041)

**Associated Occupation:** Sheet Metal Workers (47-2211)

Associated Occupation's Key Knowledge Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation	
Mechanical	6.8	17.4	8.6	<<	Extensive education and/or training may be required
Building and Construction	4.0	16.5	6.9	<<	Extensive education and/or training may be required
Design	5.2	14.9	10.3	<<	Extensive education and/or training may be required
Mathematics	9.2	14.8	8.7	<<	Extensive education and/or training may be required
Engineering and Technology	5.7	13.5	6.2	<<	Extensive education and/or training may be required
Administration and Management	8.4	11.7	5.5	<<	Extensive education and/or training may be required
Production and Processing	6.0	11.0	6.9	<<	Extensive education and/or training may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

## Skills

Similarity of Focus Occupation to Associated Occupation: 63

**Focus Occupation:** Structural Metal Fabricators and Fitters (51-2041)

**Associated Occupation:** Sheet Metal Workers (47-2211)

Associated Occupation's Key Skills Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation	
Mathematics	6.2	9.4	3.6	<<	Extensive development of skills in this area may be required
Equipment Maintenance	3.5	7.4	1.9	<<	Extensive development of skills in this area may be required

Repairing	3.4	6.9	1.7	<<	Extensive development of skills in this area may be required
Equipment Selection	3.3	6.4	2.5	<<	Extensive development of skills in this area may be required
Installation	1.7	4.4	2.0	<<	Extensive development of skills in this area may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

Abilities		Similarity of Focus Occupation to Associated Occupation: 88			
Focus Occupation: Structural Metal Fabricators and Fitters (51-2041) Associated Occupation: Sheet Metal Workers (47-2211)					
Associated Occupation's Key Abilities Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation	
Visualization	7.5	12.3	10.1	<	Some improvement in abilities may be required
Selective Attention	8.7	10.6	8.1	<<	Extensive improvement in abilities may be required
Static Strength	5.0	10.0	8.3	<	Some improvement in abilities may be required
Depth Perception	5.3	9.5	6.4	<<	Extensive improvement in abilities may be required
Auditory Attention	5.9	9.1	6.8	<<	Extensive improvement in abilities may be required
Gross Body Equilibrium	3.2	7.3	4.1	<<	Extensive improvement in abilities may be required
Speed of Limb Movement	3.2	7.1	4.2	<<	Extensive improvement in abilities may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

Activities that Both Occupations Have in Common		Similarity of Focus Occupation to Associated Occupation: 95
Focus Occupation: Structural Metal Fabricators and Fitters (51-2041) Associated Occupation: Sheet Metal Workers (47-2211)		
Work Activities	Exclusivity of Activity	
Adhere to safety procedures	12	
Build or repair structures in construction, repair, or manufacturing setting	54	
Climb ladders, scaffolding, or utility or telephone poles	56	
Determine project methods and procedures	76	
Erect scaffold	56	
Examine products or work to verify conformance to specifications	15	
Fabricate sheet metal parts or items	80	
Fabricate, assemble, or disassemble manufactured products by hand	11	

File, sand, grind, or polish metal or plastic objects	82
Identify base metals for welding	68
Identify properties of metals for repair or fabrication activities	71
Lay out machining, welding or precision assembly projects	63
Make independent judgment in assembly procedures	64
Move or fit heavy objects	8
Operate sheet metal fabrication machines	87
Perform safety inspections in construction or resource extraction setting	46
Perform safety inspections in industrial, manufacturing or repair setting	32
Position, align, or level machines, equipment, or structures	74
Read blueprints	10
Read production layouts	66
Read technical drawings	7
Recognize characteristics of alloys	71
Recognize characteristics of metals	62
Set up and operate variety of machine tools	62
Stretch, bend, straighten, shape, pound, or press metal or plastic	84
Understand technical operating, service or repair manuals	6
Use acetylene welding/cutting torch	54
Use hand or power tools	2
Use machine tools in installation, maintenance, or repair	72
Use precision measuring tools or equipment	17
Weld together metal parts, components, or structures	54

Not all positions in these occupations will necessarily perform all of the listed activities. The exclusivity rating is an indication of how unique the activity is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations engage in that activity.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

## Tools and Technologies that Both Occupations Have in Common

Similarity of Focus  
Occupation to Associated  
Occupation: 85

**Focus Occupation: Structural Metal Fabricators and Fitters (51-2041)**  
**Associated Occupation: Sheet Metal Workers (47-2211)**

Tools and Technologies	Exclusivity
Computers	1
Content authoring and editing software	1
Cutting and crimping and punching tools	3
Cutting tools	18
Data management and query software	1
Drafting supplies	9
Fastener setting tools	12
Forming tools	2
Holding and clamping tools	3
Holding and positioning and guiding systems and devices	23
Indicating and recording instruments	2
Ladders and scaffolding	6
Length and thickness and distance measuring instruments	2

Lifting equipment and accessories	3
Machine tools	7
Machinery for working wood and stone and ceramic and the like	12
Marking tools	11
Measuring and layout tools	3
Metal bending and forming machinery	17
Power tools	2
Rough and finishing tools	5
Soldering and brazing and welding machinery and supplies	6
Special tooling fixtures	16
Wrenches and drivers	2

Not all positions in these occupations will necessarily use all of the listed tools and technologies. The exclusivity rating is an indication of how unique the tool or technology is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations use that tool or technology.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.